invention and/or an allele according to the fourth aspect of the invention for comparison with a DNA analysis result.

The analysis may be a DNA profile of a sample. The profile may be based on analysis of one or more loci, in particular including one or more of HUMVWFA31/A, HUMTHO1, D8S1179, HUMFIBRA/FGA, D21S11, D18S51 or AMG. The sample may be from the scene of a crime, associated with the scene of a crime or comprise a bodily fluid sample. The sample may be used to compare two or more individuals, or samples arising therefrom, for instance in paternity and/or maternity analysis.

According to a sixth aspect of the invention we provide a method of producing an allelic ladder or mixture thereof by subjecting the ladders of the first, second or fourth aspects of the invention to PCR.

The invention will now be described, by way of example only, and with reference to the accompanying figure in which :-

Figures 12 and 16

Figure 1 illustrates the locus, allele designation and size for an embodiment of the invention;

Figure 2a shows an electrophoretogram of the allelic ladder for Amelogenin (AMG);

Figure 2b shows an electrophoretogram of the allelic ladder for HUMVWFA31/A;

Figure 2c shows an electrophoretogram of the allelic ladder for HUMTHO1;

Figure 2d shows an electrophoretogram of the allelic ladder for D8S1179;

Figure 2e shows an electrophoretogram of the allelic ladder for HUMFIBRA, low and high molecular weights;

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loci

## size (bp) allelic designa tion n 16.1 2. FGA (LMW) loci size (bp) FIGURE 10 allelic designat ion ω σ D18 loci 1.97 size (bp) allelic designat ion 1.7 ω σ VWAloci D8 size (bp) allelic designat ion m σ S ω σ

D2.1

68     233     16     146     27     342     34.2     246       70     237     17     150     AMBLO     X     105     42.2     278       72     241     18     154     X     111     42.3     285       74     245     19     158     X     111     44.2     286       75     247     20     162     X     111     45.2     296       77     251     21     166     X     11     45.2     294       79     255     X     1     45.2     294       81     259     X     X     48.2     310       81     259     X     X     48.2     310		L	-				Q <b>U</b>	the time will the three last the time that the time the	4"H-4"H	
233     16     146     27     342     34.2       237     17     150     AMBLO     X     105     42.2       241     18     154     Y     111     42.3       245     19     158     Y     111     42.3       247     20     162     Y     44.2       251     21     166     Y     45.2       255     21     166     Y     46.2       259     Y     Y     47.2       259     Y     Y     Y     48.2       259     Y     Y     Y     48.2       259     Y     Y     Y     Y     48.2       259     Y     Y     Y     Y     48.2       259     Y     Y     Y     Y     Y     Y       259     Y     Y     Y     Y     Y     Y     Y     Y     Y     Y     Y     Y     Y     Y     Y		Figu	RE 1b							
237   17   150   AMBLO   X   105   42.2     241   18   154   Y   111   42.3     245   19   158   N   44.2     247   20   162   N   44.2     251   21   166   N   45.2     255   N   N   46.2     259   N   N   48.2     259   N   N   N   48.2     259   N   N   N   168.2     259   N   N   N   168.2     259   N   N   N   168.2     259   N   N   N   N   168.2     250.2   N   N   N   N   168.2	. [	233	16	146		27	342			246
241   18   154   Y   111   42.3     245   19   158   44.2     247   20   162   45.2     251   21   166   46.2     255   1   46.2     259   48.2     259   48.2	70	237	17	150		×	105		42.2	278
245   19   158   44.2     247   20   162   45.2     251   21   166   46.2     255   1   47.2     259   48.2     259   48.2     259   50.2	72	241	18	154		X	111		42.3	282
247   20   162   45.2     251   21   166   46.2     255   8   47.2     259   8   48.2     -   50.2	74	245	19	158	·				44.2	286
251   21   166   46.2     255   47.2     259   48.2     -   50.2	75	247	20	162					45.2	290
255 47.2   259 48.2   - 50.2	77	251	21	166					46.2	294
259 48.2	79	255			;					298
50.2 310	81	259								302
		1						20	50.2	310